

Attorney Docket No. P70518US0
Application No. 10/531,261

Amendments to the claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-24 (canceled).

Claim 25 (new): A staircase lift for transporting a disabled person between floors, comprising

- at least one guide rail extending substantially parallel to a stairway,
- a moveable carrier frame suspended from the at least one guide rail including carrier support means,
- said at least one guide rail is including internal support surfaces, which are engaged by the carrier support means,
- said moveable carrier frame includes drive means comprising a rack and pinion drive for displacement of the carrier frame along the guide rail, in which a vertically disposed pinion drive wheel engaging a rack, which is provided on the lower side of the guide rail,
- the drive means is comprising a first and second guiding means pivotally arranged one behind the other on each side of the pinion drive wheel in the frame, and wherein the pivotally arranged first and second guiding means each include a movement control lever

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with a first end and where at least one set of guiding members are mounted, a second end at which point the first and second movement control levers are joined to each other by a universal joint, said universal joint being substantially in a traction plane which is perpendicular to the pinion.

Claim 26 (new): A staircase lift according to claim 25, wherein the carrier support means include at least one carrier member arranged above the pinion drive wheel substantially in the traction plane and with an axis of rotation which is substantially perpendicular to the direction of travel, and wherein each of the first and second guiding means include an essentially vertically arranged additional carrier member and a top and bottom guiding member.

Claim 27 (new): A staircase lift according to claim 25, wherein the movement control levers are pivotally mounted to the carrier frame at an equal distance from the universal joint on each side thereof.

Claim 28 (new): A staircase lift according to claim 26, wherein the guide rail has a generally reverse U-shape comprising a lower rail opening beside the rack of the guide rail, and wherein the guide rail in its internal cavity is provided with at least one support surface essentially perpendicular to the traction plane for receiving the carrier members and a

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number of substantially vertical support surfaces for receiving engagement with the guide members.

Claim 29 (new): A staircase lift according to claim 25, wherein the carrier member is slide shoe member.

Claim 30 (new): A staircase lift according to claim 25, wherein the carrier member is a roller.

Claim 31 (new): A staircase lift according to claim 25, wherein the guiding members are slide shoe members.

Claim 32 (new): A staircase lift according to claim 25, wherein the guide members are guide rollers.

Claim 33 (new): A staircase lift according to claim 25, wherein the teeth of the pinion wheel are substantially circular in the cross-section and the rack of the guide rail displays a row of correspondingly shaped circular holes.

Claim 34 (new): A staircase lift according to claim 25, wherein at least one section of the guide rail is curved in one or more planes.

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- Claim 35 (new): A staircase lift according to claim 25, wherein the staircase lift further includes a supporting guide rail mounted parallelly to the first guide rail.
- Claim 36 (new): A staircase lift according to claim 25, wherein the carrier frame is provided with a platform adapted to accommodate a wheelchair.
- Claim 37 (new): A staircase lift according to claim 25, wherein the carrier frame is provided with a foldable seat.
- Claim 38 (new): A staircase lift according to claim 25, wherein the guide rail is provided with at least one power conductor rail and the carrier frame is provided with associated contact members for providing power to an electrical motor of the drive means.
- Claim 39 (new): A staircase lift according to claim 38, wherein one or more further conductor rails and associated contact members are arranged for a lift control panel provided on the carrier frame.
- Claim 40 (new): A guide rail for use in a staircase lift assembly, said guide rail including a generally reverse U-shape comprising a bottom rail opening beside a groove for receiving a rack for cooperating with a pinion drive wheel, and wherein the guide rail in its internal

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cavity is provided with at least one carrier member support surface for receiving one or more carrier members, said at least one carrier member support surface being essentially perpendicular to a traction plane, which is perpendicular to the pinion drive wheel, and a number of substantially vertical support surfaces for receiving engagement with a number of guide members.

Claim 41 (new): A guide rail according to claim 40, wherein the guide rail is provided with side mounting means.

Claim 42 (new): A guide rail according to claim 40, wherein the guide rail is provided with an upper and a lower set of guide member support surfaces, each set having opposite surfaces.

Claim 43 (new): A guide rail according to claim 41, wherein the guide rail is provided with an upper guide member support surface facing towards the side mounting means and a second lower guide member support surface facing away from the side mounting means, and wherein the lateral distance between the side mounting means and the carrier member support surface is smaller than the distance between the side mounting means and the upper guide member support surface.

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- Claim 44 (new): A guide rail according to claim 40, wherein the guide rail is provided with at least one power conductor rail and the carrier frame is provided with associated electric contact members for providing power to driving a suspended carrier frame.
- Claim 45 (new): A guide rail according to claim 44, wherein one or more further conductor rails and associated contact members are arranged for a lift control panel provided on the carrier frame.
- Claim 46 (new): A guide rail according to claim 40, wherein said guide rail is an aluminum profile.
- Claim 47 (new): A guide rail according to claim 46, wherein the aluminum profile is provided with a surface treatment, such as a coloured surface, preferably by being anodised.
- Claim 48 (new): A guide rail according to claim 47, wherein the surface treatment provides a coloured surface.
- Claim 49 (new): A guide rail according to claim 48, wherein the coloured surface is provided by the surface being anodised.
- Claim 50 (new): A guide rail according to claim 45, wherein said guide rail is an aluminum profile.

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Claim 51 (new): A guide rail according to claim 50, wherein said guide rail is an aluminum profile.

Claim 52 (new): A guide rail according to claim 51, wherein said guide rail is an aluminum profile.

Claim 53 (new): A guide rail according to claim 52, wherein said guide rail is an aluminum profile.